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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,578

04/15/2004

Andrew Aaron

728-242

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66668

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07/24/2007

THE FARRELL LAW FIRM - IBM

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EXAMINER

NEWAY, SAMUEL G

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

07/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/825,578	AARON ET AL.	
	Examiner	Art Unit	
	Samuel G. Neway	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is responsive to the Application filed on 15 April 2004.

Claim Objections

2. Misnumbered claims 18 – 24 should be renumbered 17 – 23.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 6 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 6 and 7 recite a "prediction algorithm" that is not described in the specification. For purposes of examination, the "prediction algorithm" will be treated as the disclosed "statistical language model".

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 9 – 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In claims 9 – 16, a “system” is recited; however, it appears that the system would reasonably be interpreted by one of ordinary skill in the art as software, per se, as evidenced by claims 17 – 23. The only element recited as part of the system, “a rare sequence detector”, is not explicitly and deliberately defined in the specification, and it appears that such would reasonably be interpreted as representative of the software that causes the detection to occur.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 – 2, 8 – 10, 16 – 17, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Luther (USPN 5,500,919).

Claim 1:

Luther discloses a method for improving the intelligibility of speech output by a speech synthesizer, comprising the steps of:

determining if uncommon words exist in the text; and if it is determined that an uncommon word exists in the text, pausing the output of the synthesized speech of the uncommon word to offset the uncommon word from its surrounding speech (“It is also

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possible for an operator to select whether unknown words ... are spelled out", col. 5, lines 3-6).

Claim 2:

Luther discloses the method of claim 1, wherein the determination is made by comparing the input text to common words stored in a database and determining if a word is uncommon if the word is not in the database ("... unknown words that is, words which do not match a spelling dictionary, ...", col. 5, lines 3-6).

Claim 8:

Luther discloses the method of claim 1, wherein the pausing is inserted at least one of before, after and within the uncommon word ("It is also possible for an operator to select whether unknown words ... are spelled out", col. 5, lines 3-6).

Claims 9 – 10, and 16:

Claims 9 – 10, and 16 are similar in scope and content to claims 1 – 2, and 8; they are rejected with the same rationale.

Claims 17 and 23:

Claims 17 and 23 are similar in scope and content to claims 1 and 8; they are rejected with the same rationale.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3 – 7, 11 – 15, and 18 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luther (USPN 5,500,919) in view of Lu et al (USPN 5,819,260).

Claim 3:

Luther discloses the method of claim 1, but it does not explicitly disclose wherein a word is determined as uncommon if the word is capitalized.

In a phrase recognition method, similar to Luther's word determination, Lu categorizes capitalizes words (proper names) in order to enhance phrase recognition (col. 2, lines 59-61).

It would have been obvious to one with ordinary skill in the art at the time of the invention to use proper names (capitalized words) as uncommon because proper names are rare in spelling dictionaries

Claims 4 and 5:

Luther discloses the method of claim 1, but it does not explicitly discloses wherein the determination is made by using a statistical language model which compares a calculated value with a threshold value and if the calculated value is less than the threshold value the word is determined as uncommon.

In a phrase recognition method, similar to Luther's word determination, Lu processes phrases to determine frequency of occurrence (col. 4, lines 14-15).

It would have been obvious to one with ordinary skill in the art at the time of the invention to determine the frequency of occurrence of a word and label it as uncommon if the frequency is below a threshold because, by definition, uncommon words are rare.

Claims 6 and 7:

Luther discloses the method of claim 1, but it does not explicitly disclose wherein the determination is made by using a prediction algorithm which compares a calculated value with a threshold value and if the calculated value is less than the threshold value the word is determined as uncommon.

In a phrase recognition method, similar to Luther's word determination, Lu processes phrases to determine frequency of occurrence (col. 4, lines 14-15).

It would have been obvious to one with ordinary skill in the art at the time of the invention to determine the frequency of occurrence of a word and label it as uncommon if the frequency is below a threshold because, by definition, uncommon words are rare.

Claims 11 – 15:

Claims 11 – 15 are similar in scope and content to claims 3 – 7; they are rejected with the same rationale.

Claims 18 – 22:

Claims 18 – 22 are similar in scope and content to claims 3 – 7; they are rejected with the same rationale.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel G. Neway whose telephone number is 571-270-1058. The examiner can normally be reached on Monday - Friday 8:30AM - 5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SN


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SUPERVISORY PATENT EXAMINER
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